



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,087	09/05/2003	James Copland Moyer	38616-8009US	9932
25096	7590	11/23/2005	EXAMINER	
PERKINS COIE LLP			CHOE, HENRY	
PATENT-SEA			ART UNIT	
P.O. BOX 1247			2817	
SEATTLE, WA 98111-1247			PAPER NUMBER	

DATE MAILED: 11/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

*AX*

<b>Office Action Summary</b>	<b>Application No.</b> 10/656,087	<b>Applicant(s)</b> MOYER, JAMES COPLAND	
	<b>Examiner</b> Henry K. Choe	<b>Art Unit</b> 2817	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 are still rejected under 35 U.S.C. 103(a) as being unpatentable over Butler et al (Fig. 2) in view of Young (Fig. 1).

Regarding claims 1 and 6, Butler et al (Fig. 2) discloses an amplifier circuit comprising an input stage (J1, J2) including two transistors and the two transistors (J1, J2) operating at substantially the same current [(I1) It should be noted that the two input transistors J1 and J2 of Butler et al share the same tail current I1 as same manner as the claimed invention], and an amplification stage (2) which receives a signal (the signals coming out of the drains of J1 and J2) from the input stage (J1, J2) and provides an output signal (output of 2) related to the signal (the signals coming out of the drains of J1 and J2). As described above, Butler et al (Fig. 2) discloses all the limitations in the claims except for that the two transistors having different threshold voltage implants. Young (Fig. 1) discloses an amplifier circuit comprising an input stage (10, 12, 24, 26, 38) including two transistors (10, 24) wherein the two transistors (10, 24) having different threshold voltage implants (It should be noted that the n-type transistor 10 has a different threshold voltage than the p-type transistor 24). It would have been obvious to one of ordinary skill in the art, at the time the invention was made would have found it obvious to have employed the two transistors with the different threshold voltage at the input stage of Butler et al (Fig. 2), such as taught by Young (Fig. 1) in order to provide the advantageous benefit of supplying a higher impedance and therefore higher gain and lower power dissipation (see column 3, lines 4-7).

Regarding claim 2, wherein one (10) of the two (10, 24) transistors of Young (Fig. 1) does not have a threshold voltage implant.

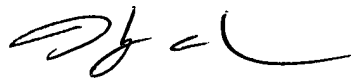
Regarding claim 3, the two transistors of the input stage (J1, J2) of Butler et al (Fig. 2) are two source coupled transistors.

Art Unit: 2817

Regarding claims 4, 5 and 7, the two transistors of the input stage (J1, J2) of Butler et al are the p-channel MOS transistors (see column 1, lines 58-62).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Henry Choe whose telephone number is (571) 272-1760.

A handwritten signature in black ink, appearing to read 'H. Choe', with a stylized flourish at the end.

**HENRY CHOE  
PRIMARY EXAMINER**